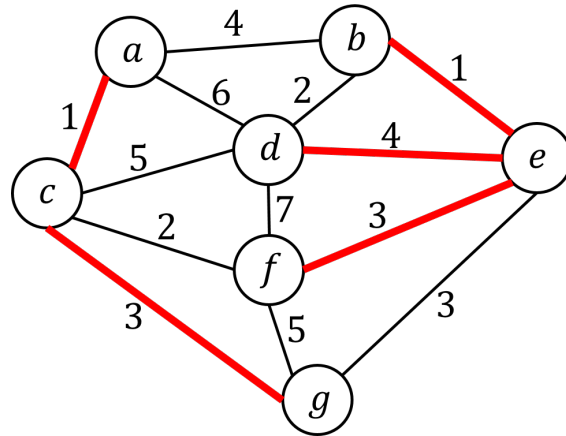


COSC 311: ALGORITHMS
MINI 7

Due Wednesday, October 24 in class

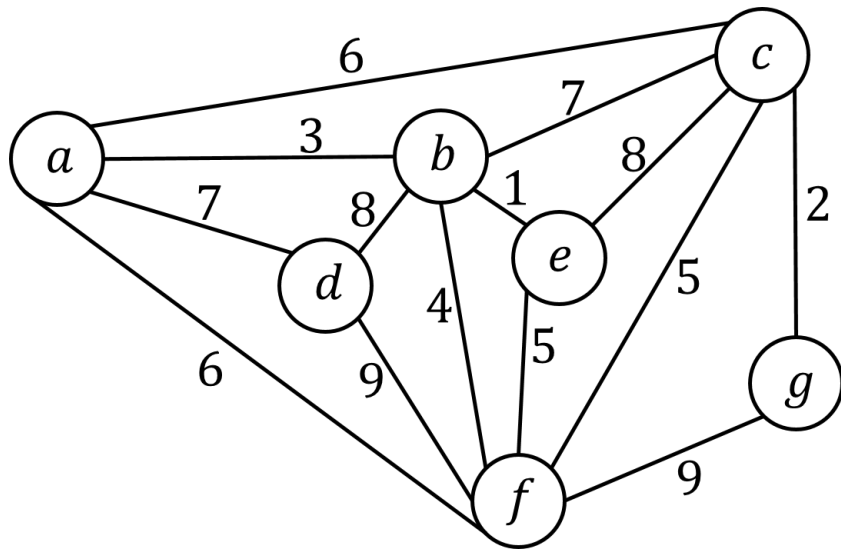
1. **Definitions.** Here's a graph: The thick red edges represent a subset of the graph's edges.



(a) Give a cut that respects the set of red edges.

(b) List all the light edges across the cut you gave in part (a).

2. **Minimum spanning trees.** Here's a graph:



In what order are edges added to a minimum spanning tree when running each of the following algorithms? (You can break ties however you want, if needed.)

(a) Prim's algorithm

(b) Kruskal's algorithm